

ABSTRACT OF THE DISCLOSURE

An electrolyte membrane/electrode assembly 9 of a solid polymer electrolyte fuel cell includes an electrolyte membrane 2, and an air pole 3 and a fuel pole 4 provided to sandwich the electrolyte membrane 2 therebetween. Each of the electrolyte membrane, the air pole and the fuel pole includes a polymer ion-exchange component. The electrolyte membrane/electrode assembly has an ion-exchange capacity I_c in a range of $0.9 \text{ meq/g} \leq I_c \leq 5 \text{ meq/g}$, and a dynamic viscoelastic modulus at 85°C in a range of $5 \times 10^8 \text{ Pa} \leq D_v \leq 1 \times 10^{10} \text{ Pa}$. In the electrolyte membrane/electrode assembly 9, a high power-generating performance can be maintained at an operating temperature not lower than 85°C .

09897426-070304